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10/685,074	10/14/2003	Donald Paul Archiable	VOCP101US	4331

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EXAMINER	
VUONG, QUOCHIEN B	

ART UNIT	PAPER NUMBER
2618	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	**Application No.** 10/685,074	**Applicant(s)** ARCHIABLE, DONALD PAUL	
	Examiner Quochien B. Vuong	**Art Unit** 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 June 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-45* is/are pending in the application.

4a) Of the above claim(s) *38 and 39* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-37 and 40-45* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-37 and 40-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Novakov (US 6,571,103) in view of Hightower et al. (US 5,276,277).

Regarding claim 1, Novakov (figure 1) discloses a system configures to create a wireless network near a surface, comprising: an information receiving logic (12) configured to receive an information signal; a driven element (10) configured to transmit an outbound information signal at a predetermined power and a predetermined frequency that create a transmission zone (using Bluetooth transceiver); and a transmission line (line between 12 and 10) configured to facilitate transferring a first intermediate signal, from which the outbound information signal is derived, from the information receiving logic to the driven element (column 3, line 66 – column 4, line 46). Novakov does not specifically disclose the transmission zone is restrictively ranged proximate to at least a portion of the surface. However, Hightower et al. disclose the transmission range can be adjusted depending on the desired system (column 12, lines 54-65). Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to adapt the teaching of Hightower et al. for adjusting the transmission zone to a desired office space that is restrictively ranged proximate to at least a portion of the surface to the system of Novakov as a system design preference to reduce electromagnetic interference, secure communications, and to customize communication between the respective bounded office space.

Regarding claim 2, Hightower et al. disclose a shield configured to mold the transmission zone (column 15, lines 52-63).

Regarding claim 3, Hightower et al. disclose the transmission zone molded to be smaller than an environment within which the system is located (column 15, lines 52-63).

Regarding claims 4 and 5, it would have obvious for the shield of Hightower et al. to be frequency non-specific as a system design preference so that the system can be used in any frequency.

Regarding claims 6-8, Novakov and Hightower et al. do not specifically disclose the molded zone being substantially spherical. However, the examiner takes Official notice the spherical transmission zone is well known in the art. Therefore, it would have been obvious for one having ordinary skill in the art to make the transmission zone being substantially spherical as desire and in fact most of the transmission zones are substantially spherical in space.

Regarding claim 9, Novakov discloses the driven element configured to transmit the outbound information signal to an electronic device substantially positioned within the limited zone, and the designated power output of the outbound information signal being substantially less than a power of an outbound signal from the electronic device (column 3, line 66 – column 4, line 46).

Regarding claim 10, Hightower et al. disclose at least a portion of the surface comprising one or more of, a desktop, a tabletop, a desk, a table, a wall a ceiling, a floor, a door, a window, a kiosk surface, a work surface, an airplane seat, an airplane seat-back, an airplane tray-table, an automatic interior, medical furniture, a medical enclosure, and a cabinet (see figures 1-4).

Regarding claims 11-18, the molded transmission zone of the system of Hightower can obvious being less than twenty four inches in plane and substantially discontinuous from a space a user's body occupied when operating in an environment within which the molded transmission zone is located as one would arrange the shields as desired depending on the system design preference (column 12, lines 54-65).

Regarding claims 19-21, the system of Novakov and Hightower et al. can obviously comprising a plurality of driven element configured to create a plurality of transmission zones or plurality of shields configured to mold the plurality of transmission zones and the transmission zones molded so as to not overlap each other as a system design preference to have more than one transmission zones.

Regarding claims 22-25, it would have been obvious for the system of Novakov and Hightower et al. comprising transmission zones molded so as to not overlap each other, two or more shields configured to abate a portion of the zone, divide and arrange in any position as a system design preference serving the same function as to provide a plurality of transmission zones.

Regarding claims 26-28, Novakov disclose where the information receiving logic, the driven element, and the transmission line are integrated into a single PVLAN-space element (column 3, line 66 – column 4, line 46, wherein the Bluetooth range reads on the PVLAN-space).

Regarding claims 29, 31 and 32, Novakov and Hightower et al. do not specifically disclose an effective zone indicator on the PVLAN-space element work-surface configured to visually illustrate a boundary associated with the unabated portion of the zone. However, the difference does not involve any inventive idea, since it would have been obvious for one having ordinary skill in the art to put a note or sign around the transmission zone to let people know if they are within the transmission zone or not.

Regarding claim 30, Novakov discloses where the information receiving logic, the driven element, and the transmission line are integrated into a single PVLAN-space element (column 3, line 66 – column 4, line 46, wherein the Bluetooth range reads on the PVLAN-space).

Regarding claim 33, Novakov (figure 1) discloses a method of creating a wireless network near a surface, comprising: receiving an information signal; selectively deriving an intermediate signal from the information signal (AP12); selectively relaying the intermediate signal to a driven element (LS 10); transmitting an outbound information signal derived from the intermediate signal from the driven element at a predetermined power output and predetermined frequency, that create a transmission zone (within the Bluetooth range) (column 3, line 66 – column 4, line 46). Novakov does not specifically disclose the transmission zone that is restrictively ranged proximate to at least a portion of the surface; and positioning one or more shields to perform one or more of, molding the size of the limited transmission zone, molding the shape of the limited transmission zone, protecting the limited transmission zone from RF interference, and limiting interference produced by transmitting the outbound information signal. However, Hightower et al. disclose the transmission range can be adjusted depending on the desire system (column 12, lines 54-65), and positioning one or more shields to perform one or more of, molding the size of the limited transmission zone, molding the shape of the limited transmission zone, protecting the limited transmission zone from RF interference, and limiting interference produced by transmitting the outbound information signal (column 15, lines 52-63). Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to adapt the teaching of Hightower et al. for adjusting the transmission zone to a desire office space that is less than thirty six inches in a plane and positioning one or more shields to perform one or more of, molding the size of the limited zone, molding the shape of the limited zone, protecting the limited zone from RF interference, and limiting interference produced by transmitting the outbound information signal to the method of Novakov as a system design preference to reduce electromagnetic interference, secure communications, and to customize communication between the respective bounded office space.

Regarding claim 34, Novakov discloses the information signal comprising one or more of, a telephone signal, a television signal, a computer signal, a facsimile signal, an internet signal, a DSL signal, a broadcast signal, a GPS signal, and a radio signal (column 14, lines 5-8).

Regarding claim 35, Hightower et al. disclose the outbound information signal can be obviously transmitted with a power that is less than about 1/48 of the power of the outbound signal transmitted from the electronic device (see figure 1; column 12, lines 54-65). Novakov disclose the driven element being configured to transmit the outbound information signal in a power range from about 1 mW to about 100 mW (0.1W). Therefore, and Hightower et al. do not specifically disclose the driven element being configured to transmit the outbound information signal in a power range from about 0.01 mW to about 0.1W. However, the examiner takes Official notice that transmitting signal in a power range from about 0.01 mW to about 0.1W is well known in the art. Therefore, it would have been obvious for the transmission power range of the method of Novakov and Hightower et al. to have the transmission range between 0.01 mW to about 0.1W as a system design preference for a specific system.

Regarding claim 36, Hightower et al. disclose the driven element being configured to transmit the outbound information signal in a frequency range from about 500 MHz to about 1.5 GHz (column 11, line 66 – column 12, line 42).

Regarding claim 37, Novakov discloses a system (figure 1), comprising:
an information receiving logic (12) configured to receive an information signal;
a driven element (10) configured to transmit an outbound information signal at a predetermined power and a predetermined frequency that create a transmission zone (using Bluetooth transceiver); and a transmission line (line between 12 and 10) configured to facilitate transferring a first intermediate signal, from which the outbound information signal is derived, from the information receiving logic to the driven element;

and an override panel configured to provide access to a wired connection by which the information signal can be received (figure 1; column 3, line 66 – column 4, line 46); and the system could have been obvious to be placed on a piece of furniture as desired by a user. Novakov does not specifically disclose the transmission zone is restrictively ranged proximate t oat least a portion of the surface; and a shield configured to perform one or more of, molding the transmission zone, to at least partially block electromagnetic radiation from entering the transmission zone, and to at least partially block the outbound signal from leaving the transmission zone. However, Hightower et al. disclose the transmission range can be adjusted depending on the desire system (column 12, lines 54-65); and a shield configured to perform one or more of, molding the transmission zone, to at least partially block electromagnetic radiation from entering the transmission zone, and to at least partially block the outbound signal from leaving the transmission zone (column 15, lines 52-63). Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to adapt the teaching of Hightower et al. for adjusting the transmission zone to a desire office space that is less than forty eight inches in a plane and a shield configured to perform one or more of, molding the size of the limited zone, molding the shape of the limited zone, protecting the limited zone from RF interference, and limiting interference produced by transmitting the outbound information signal to the system of Novakov as a system design preference to reduce electromagnetic interference, secure communications, and to customize communication between the respective bounded office space.

Regarding claim 40, Hightower et al. disclose the driven element configured to transmit the outbound information signal extending outward from at least a portion of the surface (column 12, lines 43-65).

Regarding claim 41, Hightower et al. disclose the outbound information signal can be obviously transmitted with a power that is less than about 1/48 of the power of the outbound signal transmitted from the electronic device (see figure 1; column 12, lines 54-65). Novakov disclose the driven element being configured to transmit the outbound information signal in a power range from about 1 mW to about 100 mW (0.1W). Therefore, it would have been obvious for the transmission power range of the method of Novakov and Hightower et al. to have the transmission range between 0.01 mW to about 0.1W as a system design preference for a specific system.

Regarding claim 42, the system of Novakov and Hightower et al. can obviously comprising a plurality of driven element configured to create a plurality of transmission zones as a system design preference to have more than one transmission zones.

Regarding claim 43, Hightower et al. disclose transmitting the outbound information signal
comprising: transmitting the outbound information signal extending outward from at least a portion of the surface.

Regarding claim 44, Hightower et al. disclose the driven element configured to transmit the outbound information signal extending outward from at least a portion of the surface.

Regarding claim 45, Novakov (figure 1) discloses a system discloses a system configures to create a wireless network near a surface, comprising: an information receiving logic (12) configured to receive an information signal; a driven element (10) configured to transmit an outbound information signal at a predetermined power and a predetermined frequency that create a transmission zone (using Bluetooth transceiver); and a transmission line (line between 12 and 10) configured to facilitate transferring a first intermediate signal, from which the outbound information signal is derived, from the information receiving logic to the driven element (column 3, line 66 – column 4, line 46). Novakov disclose the driven element being configured to transmit the outbound information signal in a power range from about 1 mW to about 100 mW (0.1W) (column 5, lines 33-44). Therefore, it would have been obvious for the transmission power range of the method of Novakov to have the transmission range between 0.01 mW to about 0.1W as a system design preference for a specific system. Novakov does not specifically disclose the transmission zone is restrictively ranged proximate to at least a portion of the surface; wherein at least a portion of the surface comprising one or more of a desktop, a tabletop, a desk, a table, a wall, a ceiling, a floor, a door, a window, a kiosk surface, a work surface, an airplane seat, an airplane seat-back, an airplane tray-table, an automobile interior, medical furniture, a medical enclosure, and a cabinet; the predetermined power of the outbound information signal transmitted with a power that is less than about 1/48th of the power of the outbound signal transmitted from the electronic device; at least one frequency non-specific shield configured to mold the transmission zone into a substantially spherical molded transmission zone that is less than twenty four inches in a plane, that is not coextensive with the environment within which the transmission zone is located, and that is substantially discontinuous from a space a user's body occupies when operating in an environment within which the molded transmission zone is located; and a plurality of effective zone indicators located on the surface and configured to visually indicate respective boundaries of the molded transmission zone. However, Hightower et al. disclose the transmission range can be adjusted depending on the desired system (column 12, lines 54-65); at least a portion of the surface comprising one or more of, a desktop, a tabletop, a desk, a table, a wall a ceiling, a floor, a door, a window, a kiosk surface, a work surface, an airplane seat, an airplane seat-back, an airplane tray-table, an automatic interior, medical furniture, a medical enclosure, and a cabinet (see figures 1-4); the outbound information signal can be obviously transmitted with a power that is less than about 1/48 of the power of the outbound signal transmitted from the electronic device (see figure 1; column 12, lines 54-65); and a shield configured to perform one or more of, molding the transmission zone, to at least partially block electromagnetic radiation from entering the transmission zone, and to at least partially block the outbound signal from leaving the transmission zone (column 15, lines 52-63). Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to adapt the teaching of Hightower et al. for adjusting the transmission zone to a desire office space that is less than twenty four inches in a plane; the outbound information signal can be obviously transmitted with a power that is less than about 1/48 of the power of the outbound signal transmitted from the electronic device; and a shield configured to perform one or more of, molding the size of the limited zone, molding the shape of the limited zone, protecting the limited zone from RF interference, and limiting interference produced by transmitting the outbound information signal to the system of Novakov as a system design preference to reduce electromagnetic interference, secure communications, and to customize communication between the respective bounded office space. And it would have obvious for the shield of Hightower et al. to be frequency non-specific as a system design preference so that the system can be used in any frequency. Novakov and Hightower et al. do not specifically disclose an effective zone indicator on the PVLAN-space element work-surface configured to visually illustrate a boundary associated with the unabated portion of the zone. However, the difference does not involve any inventive idea, since it would have been obvious to put a note or sign around the transmission zone to let people know if they are within the transmission zone or not.

Response to Arguments

Applicant's arguments filed 06/28/2010 have been fully considered but they are not persuasive.

Regarding claims 1, 33 and 37, Applicant argues that Novakov and Hightower do not disclose “transmitting an outbound information signal at a predetermined power and a predetermined frequency that create a transmission zone that is restrictively ranged proximate to at least a portion of a surface”. The examiner, however, does not agree with the Applicant. Novakov discloses transmitting an outbound information signal at a predetermined power and a predetermined frequency that create a transmission zone (column 3, line 66 – column 4, line 46; and column 5, lines 32-44). And Hightower et al. disclose the transmission range can be adjusted depending on the desired system (column 12, lines 54-65). Therefore the combination of Hightower and Novakov reads on the claimed limitation as in the rejection above.

And further Hightower discloses the electromagnetic transmission can be individually designed to reduce electromagnetic interference, secure communications, and to customize communication between the respective bounded office space (column 12, lines 54-65); therefore it would be obvious for the transmission zone to be in any short ranges including forty eight, thirty six, or twenty four inches in space.

Regarding claims 29 and 31, Novakov and Hightower et al. do not specifically disclose an visual indicator that indicates a boundary of the transmission zone. However, the difference does not involve any inventive idea, since it would have been obvious for one having ordinary skill in the art to put a note or sign around the transmission zone to let people know if they are within the transmission zone or not.

Regarding claims 40, 44, and 45, since the system of Novakov and Hightower et al. is used in Bluetooth and electromagnetic signal environment, it can transmit the outbound information signal extending outward from at least a portion of the surface.

The features of other claims are also addressed in the rejection above.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quochien B. Vuong whose telephone number is (571) 272-7902. The examiner can normally be reached on M-F 9:30-18:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on (571) 272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Quochien B Vuong/
Primary Examiner, Art Unit 2618